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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. FILING DATE DOMATION NO. APPLICATION NO. 214039US2X 5982 09/961,112 09/24/2001 Hideki Kinugawa **EXAMINER** 03/16/2004 22850 7590 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. LOUIS JACQUES, JACQUES H 1940 DUKE STREET ART UNIT PAPER NUMBER ALEXANDRIA, VA 22314 3661

DATE MAILED: 03/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Office Action Summary	09/961,112	KINUGAWA, HIDEKI	
	Examiner	Art Unit	
	Jacques H Louis-Jacques	3661	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).			
Status			
<ul> <li>1) Responsive to communication(s) filed on 14 January 2004.</li> <li>2a) This action is FINAL. 2b) This action is non-final.</li> <li>3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.</li> </ul>			
Disposition of Claims			
4)  Claim(s) 1,3,6-9,13-15 and 20-22 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5)  Claim(s) is/are allowed.  6)  Claim(s) 1,3,6-9,13-15 and 20-22 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/or election requirement.			
Application Papers			
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	epted or b) objected to by the drawing(s) be held in abeyance. S ion is required if the drawing(s) is	See 37 CFR 1.85(a). Objected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.			
Attachment(s)  1) ☑ Notice of References Cited (PTO-892)  2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 14.	4) Interview Summa Paper No(s)/Mail 5) Notice of Informa 6) Other:		

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### DETAILED ACTION

### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 14, 2004 has been entered.

Claims 1, 3, 6-9, 13-15, 20-22 are pending and presented for examination.

# Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an

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international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 3, 6-9, 13-15 and 20-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Ehrman et al [US 20010037298 A1].

Ehrman et al discloses a fully automated vehicle rental system comprising operating information collection means for collecting operating information regarding operation of vehicle (abstract); a first receiving device provided in a base station for controlling said construction machine (page 2); storage means at said construction machine for storing the operating information (abstract and page 2); a transmission controller for transmitting the operating information read from the storage means to the first receiving device through a wireless radio having a limited range, wherein said first receiving device includes means for determining that the construction machine is within a transmission permissible area related to the limited range of the wireless radio when the construction machine returns to the base station (page 2), wherein said transmission controller comprises means for transmitting the operating information read from the storage means to the first receiving device through the wireless radio when said means for determining determines that the construction machine is within a transmission permissible area related to the limited range of the wireless radio when the construction machine returns to the base station (pages 2 and 3). Ehrman et al also discloses an operating information control device for controlling said operating information received by said first receiving device; and operating information accumulating means provided

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on said operating information control device to accumulate said operating information, said operating information accumulating means classifying said operating information for plural construction machines (figure 2 [1a-f] and page 2), a movable body (e.g., second vehicle) on which is mounted a second receiving device for receiving said operating information transmitted from said transmission controller (page 2). The receiving device, according to Ehrman et al, provides data and time on which receiving and transmitting of said operating information is carried out relative to said construction machine for said operating information control device as incoming or outgoing date and time information of said construction machine (pages 3 and 4). Furthermore, there is provided a means for confirming whether communication is established when said operating information control device tries to get into communication periodically with said construction machine within the base station to thereby check existence of said construction machine (page 4).

### Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1, 3, 6-9, 13-15 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imanishi et al [6,349,252] in view of Ehrman et al [US 20010037298 A1].

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Imanishi et al discloses an information device for construction machinery, wherein there is provided an information collection means for collecting operating information regarding operation of a construction machine (abstract, figure 1, columns 8-10, 18-19), a storage means for storing the operating information (abstract, figure 1, columns 8-10) and a transmission controller for transmitting the operating information read from the storage means to a first receiving device provided except [in] the construction machine through a wireless radio, wherein the transmission controlled transmitting the operating information to the first receiving device when receiving a transmission request from outside of the construction machine (columns 8-12, 21). Furthermore, Imanishi et al discloses an operating information accumulating means provided on the operating information control device to accumulate the operating information and store the accumulated operating information (abstract and column 8). Additionally, the first receiving device is provided in a base or remote station external to the construction machine (column 21). Imanishi et al does not particularly disclose that the construction machine is within a transmission permissible area. Ehrman et al, on the other hand, discloses a fully automated vehicle rental, wherein a first receiving deice is provided in a base station for controlling the vehicle, According to Ehrman et al, there is provided a transmission controller for controlling the transmission of the stored operation information read from the storage device to the receiving device at the base station through a wireless radio having a limited (e.g., medium) range, wherein the information is transmission when the vehicle returns to the base station and is within a transmission permissible area related to the limited range of the wireless radio. See

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figure 2, and pages 2-4. Thus, it would have been obvious to one skilled in the art at the time of the invention to modify the information device for construction machinery of Imanishi et al by incorporating the features from the system of Ehrman et al because they are both in the field of rental service an, as suggested by Ehrman et al on page 4, such system would reduce costs, and become the transmitter/receiver device knows when to transmits, the amount of transmission in the air is reduced.

6. Claims 1, 3, 6-9, 13-15 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imanishi et al [6,349,252] in view of Cannon et al [US 6408232 B1].

Imanishi et al discloses the limitations as set forth above. However, Imanishi et al does not particularly disclose that the construction machine is within a transmission permissible area and that the receiving device is provided in a base station. Cannon et al, on the other hand, discloses a wireless piconet access to vehicle operational statistics. According to Cannon et al a first receiving device (wireless piconet transceiver) is provided in a base station (or garage or service center) for controlling the vehicle. See abstract. In addition, Cannon et al discloses transmitting the stored operating information through a wireless radio having a limited range (column 2, 4) when the vehicle is within a transmission permissible area related to the limited range of the wireless radio (column 2, 4) when the vehicle returns to the base station (figure 4, column 2). Additionally, Cannon et al discloses that the receiving device can also be provided on a movable body (e.g., other vehicles) external to the vehicle (column 3). It is to be noted also that Cannon et al discloses the operating information collecting means for collecting information regarding

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operation of the vehicle and storage means for storing the operating information (abstract, figure 2, column 1). Furthermore, the system to Cannon et al relates to a plurality of vehicles, wherein the operating information is collected and classified for the plurality of vehicles (figure 3, column 4). See also columns 5-8. Thus, it would have been obvious to one skilled in the art at the time of the invention to be motivated to modify the teachings of Imanishi et al by incorporating the features from the system of Cannon et al because such modification would quick and accurate download of the vehicle operating information, while eliminating the need for expensive and long range transmission of the operating information.

7. Claims 1, 3, 6-9, 13-15 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imanishi et al [6,349,252] in view of Strong [US 6006148 A].

Imanishi et al discloses the limitations as set forth above. However, Imanishi et al does not particularly disclose that the construction machine is within a transmission permissible area and that the receiving device is provided in a base station. Strong, on the other hand, discloses an automated vehicle return. According to the system of Strong, a first receiving device is provided in a base station (figure 1) for controlling the vehicle. See figure 2, 3 and pages4-5. In addition, Strong discloses transmitting the stored operating information through a wireless radio having a limited range (column 1) when the vehicle is within a transmission permissible area related to the limited range of the wireless radio (column 1) when the vehicle returns to the base station (column 1). See also column 2. Additionally, Strong discloses that the receiving device can also be

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provided on a movable body (e.g., airport shuttle 42, figure 1) external to the vehicle (page 2). It is to be noted also that Strong discloses the operating information collecting means for collecting information regarding operation of the vehicle and storage means for storing the operating information (figure 11). Furthermore, according to Strong, the receiving device provides data and time of the operating information related to the vehicle transaction (incoming/outgoing). See abstract and column 1. The system of Strong, as described in column 4, applies also to a plurality of vehicles. See also column 5. Thus, it would have been obvious to one skilled in the art at the time of the invention to be motivated to modify the teachings of Imanishi et al by incorporating the features from the system of Strong because such modification, as suggested by Strong in column 1, would eliminate (minimize) costs and labor, while minimizing unnecessary delay in transmission.

8. Claims 1, 3, 6-9, 13-15 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al [6,256,594] in view of Ehrman et al [US 20010037298 A1].

Yamamoto et al discloses a machine fault monitoring apparatus and method, wherein operating information of a working or construction machine is monitored, collected and stored. According to Yamamoto et al, the collected operating information is transmitted over a wireless radio to a first receiving device at a remote station (20). Data are transmission upon request or periodically for a predetermined period of time. See abstract. According to Yamamoto et al, the base station is remote to the construction machine and the operating information of the construction machine is accumulated. See

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also the abstract. According further to Yamamoto et al, as set forth in figure 3, data and time of the operating information are provided. In another embodiment, as depicted in figure 8, for example, the operating information is transmitted to a second construction vehicle and the monitoring station (20). Yamamoto does not particularly disclose that the construction machine is within a transmission permissible area. Ehrman et al, on the other hand, discloses a fully automated vehicle rental, wherein a first receiving deice is provided in a base station for controlling the vehicle, According to Ehrman et al, there is provided a transmission controller for controlling the transmission of the stored operation information read from the storage device to the receiving device at the base station through a wireless radio having a limited (e.g., medium) range, wherein the information is transmission when the vehicle returns to the base station and is within a transmission permissible area related to the limited range of the wireless radio. See figure 2, and pages 2-4. Thus, it would have been obvious to one skilled in the art at the time of the invention to modify the machine fault monitoring apparatus of Yamamoto by incorporating the features from the system of Ehrman et al because, as suggested by Ehrman et al on page 4, such system would reduce costs, and become the transmitter/receiver device knows when to transmits, the amount of transmission in the air is reduced.

9. Claims 1, 3, 6-9, 13-15 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al [6,256,594] in view of Cannon et al [US 6408232 B1].

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Yamamoto et al discloses the limitations as set forth above. However, Yamamoto et al does not particularly disclose that the construction machine is within a transmission permissible area and that the receiving device is provided in a base station. Cannon et al, on the other hand, discloses a wireless piconet access to vehicle operational statistics. According to Cannon et al a first receiving device (wireless piconet transceiver) is provided in a base station (or garage or service center) for controlling the vehicle. See abstract. In addition, Cannon et al discloses transmitting the stored operating information through a wireless radio having a limited range (column 2, 4) when the vehicle is within a transmission permissible area related to the limited range of the wireless radio (column 2, 4) when the vehicle returns to the base station (figure 4, column 2). Additionally, Cannon et al discloses that the receiving device can also be provided on a movable body (e.g., other vehicles) external to the vehicle (column 3). It is to be noted also that Cannon et al discloses the operating information collecting means for collecting information regarding operation of the vehicle and storage means for storing the operating information (abstract, figure 2, column 1). Furthermore, the system to Cannon et al relates to a plurality of vehicles, wherein the operating information is collected and classified for the plurality of vehicles (figure 3, column 4). See also columns 5-8. Thus, it would have been obvious to one skilled in the art at the time of the invention to be motivated to modify the teachings of Yamamoto et al by incorporating the features from the system of Cannon et al because such modification would quick and accurate download of the vehicle operating information, while eliminating the need for expensive and long range transmission of the operating information.

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10. Claims 1, 3, 6-9, 13-15 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al [6,256,594] in view of Strong [US 6006148 A].

Yamamoto et al discloses the limitations as set forth above. However, Yamamoto et al does not particularly disclose that the construction machine is within a transmission permissible area and that the receiving device is provided in a base station. Strong, on the other hand, discloses an automated vehicle return. According to the system of Strong, a first receiving device is provided in a base station (figure 1) for controlling the vehicle. See figure 2, 3 and pages 4-5. In addition, Strong discloses transmitting the stored operating information through a wireless radio having a limited range (column 1) when the vehicle is within a transmission permissible area related to the limited range of the wireless radio (column 1) when the vehicle returns to the base station (column 1). See also column 2. Additionally, Strong discloses that the receiving device can also be provided on a movable body (e.g., airport shuttle 42, figure 1) external to the vehicle (page 2). It is to be noted also that Strong discloses the operating information collecting means for collecting information regarding operation of the vehicle and storage means for storing the operating information (figure 11). Furthermore, according to Strong, the receiving device provides data and time of the operating information related to the vehicle transaction (incoming/outgoing). See abstract and column 1. The system of Strong, as described in column 4, applies also to a plurality of vehicles. See also column 5. Thus, it would have been obvious to one skilled in the art at the time of the invention to be motivated to modify the teachings of Yamamoto et al by incorporating the features

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from the system of Strong because such modification, as suggested by Strong in column 1, would eliminate (minimize) costs and labor, while minimizing unnecessary delay in transmission.

## Response to Amendments & Arguments

11. The amendments along with the request for continued examination and arguments filed therewith on January 14, 2004 have been entered and carefully considered by the examiner.

It is noted on page 7 of the "Amendment" under the heading "Remarks/Arguments" that Applicant refers to "claims 1, 3, 6-9, 13-15 and 17-22" as being active in the present application. However, claims 17-19 had been canceled. See Amendment at page 5.

Accordingly, the pending/active claims in the present are claims 1, 3, 6-9, 13-15 and 20-22.

Applicant has amended the claims to recite that the first receiving device is provided "in a base station for controlling" the construction machine and that the transmission controller controls the transmission of the operating information read from the storage means "when the construction machine returns to the base station." See, in particular, amended independent claims 1, 9, and 15 and newly added independent claim 22. Emphasis added.

On page 8 of the response, Applicant acknowledges that "Imanishi et al discloses an information management controller 1 provided on a construction machine and send stored data to a monitoring station 19". However, Applicant argues that Imanishi et al "has no description about the manner in which the stored data is sent."

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Applicant also acknowledges the teachings of Yamamoto, but argues "Yamamoto also lacks a description of determining whether a construction machine is within a permissible region which is related to the limited range of the wireless radio when the construction machine returns to the base station." See page 8 of the response.

The claims were rejected as being unpatentable over the combinations of Imanishi et al in view of Schubert et al and Yamamoto in view of Schubert et al. The patent to Schubert et al was used for its disclosure of providing a receiver that is activated when a fob is determined to be located within a desirable proximity to the work vehicle.

While Applicant recognizes the teachings of Imanishi et al and Yamamoto, Applicant argues, with regard to the applied secondary prior art, "there is no description in Schubert et al for transmitting operating information when the construction machine returns to a base station." See response at page 8.

With respect to the newly added claim 22, Applicant asserts that the prior art do not teach providing the first receiving device on a movable body external to the construction machine." See response at page 9.

Notwithstanding Applicant's arguments, new grounds of rejection have been applied against the claims. In particular, newly discovered prior art references, including Ehrman et al [US 20010037298 A1], Cannon et al [US 6408232 B1], and Strong [US 6006148 A], in particular, disclose the limitations argued by Applicant. Other prior art references listed below in the section "prior art made of record", but not applied in rejecting the claims, also disclose similar limitations. A brief description of the applied references is as follows:

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Ehrman et al discloses a first receiving device provided in a base station for controlling the vehicle. See figure 2, 3 and pages4-5. In addition, Ehrman et al discloses transmitting the stored operating information through a wireless radio having a limited range (page 2) when the vehicle is within a transmission permissible area related to the limited rage of the wireless radio (page 2) when the vehicle returns to the base station (pages 1 and 2). Additionally, Ehrman et al discloses that the receiving device can also be provided on a movable body (e.g., other vehicles) external to the vehicle (page 2). It is to be noted also that Ehrman et al discloses the operating information collecting means for collecting information regarding operation of the vehicle and storage means for storing the operating information (figure 1 and page 2).

Cannon et al discloses a first receiving device (wireless piconet transceiver) provided in a base station (or garage or service center) for controlling the vehicle. See abstract. In addition, Cannon et al discloses transmitting the stored operating information through a wireless radio having a limited range (column 2, 4) when the vehicle is within a transmission permissible area related to the limited range of the wireless radio (column 2, 4) when the vehicle returns to the base station (figure 4, column 2). Additionally, Cannon et al discloses that the receiving device can also be provided on a movable body (e.g., other vehicles) external to the vehicle (column 3). It is to be noted also that Cannon et al discloses the operating information collecting means for collecting information regarding operation of the vehicle and storage means for storing the operating information (abstract, figure 2, column 1). Furthermore, the system to Cannon et al relates to a plurality of

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vehicles, wherein the operating information is collected and classified for the plurality of vehicles (figure 3, column 4). See also columns 5-8.

Strong discloses a first receiving device provided in a base station (figure 1) for controlling the vehicle. See figure 2, 3 and pages4-5. In addition, Strong discloses transmitting the stored operating information through a wireless radio having a limited range (column 1) when the vehicle is within a transmission permissible area related to the limited range of the wireless radio (column 1) when the vehicle returns to the base station (column 1). See also column 2. Additionally, Strong discloses that the receiving device can also be provided on a movable body (e.g., airport shuttle 42, figure 1) external to the vehicle (page 2). It is to be noted also that Strong discloses the operating information collecting means for collecting information regarding operation of the vehicle and storage means for storing the operating information (figure 11). Furthermore, according to Strong, the receiving device provides data and time of the operating information related to the vehicle transaction (incoming/outgoing). See abstract and column 1. The system of Strong, as described in column 4, applies also to a plurality of vehicles. See also column 5.

#### Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

5,058,044 Stewart et al Oct. 1991

5,635,693 Benson et al Jun. 1997

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5,870,029	Otto et al	Feb. 1999
6,226,572	Tojima et al	May 2001
6,604,038	Lesesky et al	Aug. 2003
US2002/0184062	Diaz	Dec. 2002

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques H Louis-Jacques whose telephone number is 703-305-9757. The examiner can normally be reached on M-Th 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on 703-308-3873. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jacques H Louis-Jacques Primary Examiner Art Unit 3661

/jlj March 11, 2004

